



Weekly Wire
News from East Asia and Pacific
March 19, 2013

Australia

Cooling for Supercomputer

A novel solution for cooling the Australia's largest supercomputer, an A\$80 million (83 million USD) facility currently under construction, is groundwater cooling. The system works by pumping cool water from a depth of around 100 meters through an above-ground heat exchanger to cool the supercomputer, then re-injecting the water underground again.

<http://www.csiro.au/Portals/Media/Cooling-solution-for-supercomputer-heralds-new-age-in-renewable-energy.aspx>

Ian Chubb, Australia's Chief Scientist, talks about the Peer Review System

The principles of peer review – fairness, transparency, independence, appropriateness and balance, research community participation, confidentiality, impartiality and continual improvement – give our system of peer review acceptance, respect and trust.

<http://www.chiefscientist.gov.au/2013/02/nhmrc-peer-review-symposium/>

Japan

Natural Gas from Methane Hydrate Offshore

The Japanese government announced that it has successfully extracted natural gas from a deposit of methane hydrate under the seabed off the Pacific coast of Japan. Japan is the first in the world to gasify methane hydrate extracted from the seabed. The deep-drilling capabilities of the research vessel *Chikyu* were necessary to the success to this project.

<http://mainichi.jp/english/english/newsselect/news/20130312p2g00m0bu069000c.html>

<http://www.japantimes.co.jp/news/2012/03/13/reference/methane-hydrate-energy-solution/>

<http://www.washingtonpost.com/blogs/wonkblog/wp/2013/03/12/japan-tries-to-unlock-the-worlds-biggest-source-of-carbon-based-fuel/>

Fifteen Industry-University Centers

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) selected 15 centers of industry-university cooperation in an effort to transition basic research results through to commercialization. MEXT allocated Yen 50 billion (526 million USD) for this effort. This investment will be used only for infrastructure development; another solicitation for R&D funding will be announced after the JFY2013 budget is approved. NSF Tokyo will report further on this activity after the R&D awards are made.

[\(a summary translation of the industry-university cooperative program\)](#)

Washington Post Writes about Japanese School Lunch

Schools in Japan give children the sort of food they would get at home. They are heavy on rice and vegetables, fish and soup. According to government data, the Japanese child obesity rate, always among the world's lowest, has declined for each of the past six years, a period during which the country has expanded its dietary education program.

http://www.washingtonpost.com/world/on-japans-school-lunch-menu-a-healthy-meal-made-from-scratch/2013/01/26/5f31d208-63a2-11e2-85f5-a8a9228e55e7_story.html

Colleges to double number of foreign students and courses offered in English

Japan's national universities intend to double their admissions of overseas students by 10% by 2020 and to also increase the number of courses offered in English to around 24,000. In addition, Kyoto and Kyushu universities intend to hire more foreign instructors.

<http://www.japantimes.co.jp/news/2013/03/10/national/colleges-to-double-foreign-students/#.UUAqzidi1DA>

http://www.japantimes.co.jp/news/2013/03/14/national/universities-to-boost-classes-in-english/#at_pco=cfid-1.0

Korea

Record-Fast Radio Frequency chip

Researchers at the Korea Advanced Institute of S&T (KAIST) Intelligent Radio Frequency Research Center developed a radio frequency chip that can both send and receive data, packaged together with the antenna in a relatively small size. The research team was able to transmit a full-HD class 1080p video stored in a smart phone wirelessly to an HDTV using their newly developed chip, without compressing the data.

http://english.etnews.com/device/2734127_1304.html

New Zealand

Two Papers on Sustainability

Two papers on "The Sustainable Carrying Capacity of New Zealand" and "Constraints to New Zealand's Sustainable Well-being" explore recent research in New Zealand and abroad that provides a perspective on the links between the economy and the environment. They explore the debate around New Zealand's limits, describe what research tells us about the links between well-being, wealth, and environmental impact, and consider factors that are commonly put forward as limits, such as freshwater quality, land use, losses of biodiversity, greenhouse gas emissions, and imports of transport fuels.

<http://www.royalsociety.org.nz/expert-advice/information-papers/yr2013/the-sustainable-carrying-capacity-of-new-zealand/>

Taiwan

National Science Council and Slovak Academy of Sciences sign Agreement

For the promotion of NSC/SAS scientific cooperation, both sides signed an agreement to facilitate and encourage science cooperation. The Agreement enables funding for the following scientific activities: joint research programs, joint research seminars, and personnel exchange.

<http://web1.nsc.gov.tw/techwp.aspx?id=0980610001&ctunit=209&ctnode=288&mp=7>